

# Quantification of DNA double strand breaks and oxidation response in children and adults undergoing dental CBCT scan.

## Authors

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Supplementary Table 1

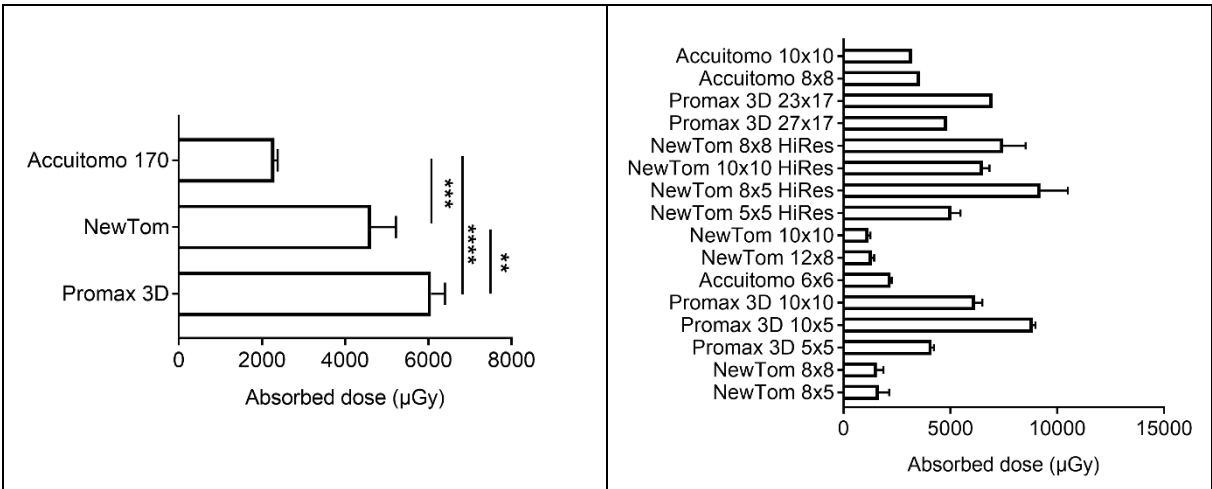
Supplementary Table 1. Power analysis for one-way repeated analysis of variance and pair t-tests.

|                         | Statistical test           | N   | Effect size<br>(F or Cohen)** | Significance<br>level | Power |
|-------------------------|----------------------------|-----|-------------------------------|-----------------------|-------|
| DNA damage:<br>children | One-way RM<br>ANOVA*       | 38  | 2.2                           | .05                   | 1     |
| DNA damage:<br>adults   | One-way RM<br>ANOVA        | 13  | 2.2                           | .05                   | .9    |
| 8-oxo-dG:<br>children   | Paired t-test<br>(2-sided) | 68  | .666                          | .05                   | .99   |
| 8-oxo-dG: adults        | Paired t-test<br>(2-sided) | 19  | 0.833                         | .05                   | .93   |
| FRAP: children          | Paired t-test<br>(2-sided) | 117 | 1.888                         | .05                   | 1     |
| FRAP: adults            | Paired t-test<br>(2-sided) | 17  | 1.888                         | .05                   | .99   |

\*: RM ANOVA = repeated measures analysis of variance

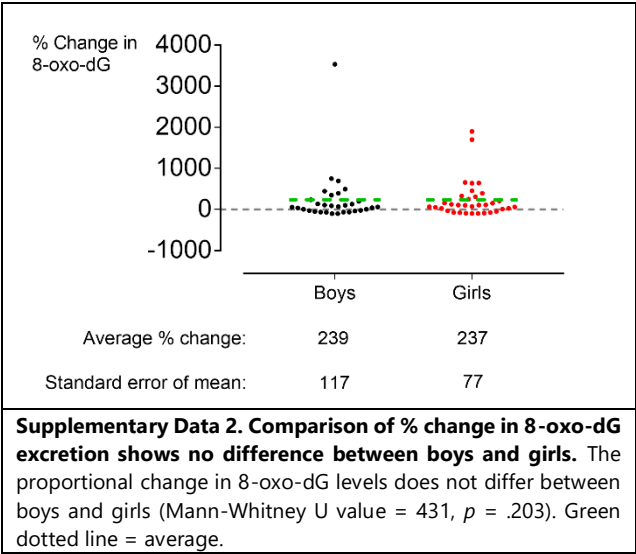
\*\*: F value for one-way RM ANOVA and Cohen's effect size for paired t-tests.<sup>58,59</sup>

Supplementary Data 1



**Supplementary Data 1. Absorbed radiation dose does not only depend on the device uses, but also on the field of view (FOV) and scanning protocol used during the examination. (left).** Patients examined using a Promax 3D device receive on average a higher radiation dose than those examined with a Accuitomo 170 device or NewTom device. However, these data do not take into account the FOV or the scanning protocol. **(right).** Radiation dose increases with increasing FOV and resolution of the scan. This is seen for all devices (except for Accuitomo 170 for which only one scanning protocol was used). Furthermore, the radiation dose is higher when high resolution (HiRes) protocols were used. This explains the differences seen in the left panel, since for Planmeca ProMax and NewTom HiRes protocols were used, whereas only standard protocols were used in Accuitomo. No significances were shown in the right panel. \*\*\*:  $p < .0002$ , \*\*\*\*:  $p < .0001$ .

34      **Supplementary Data 2**



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